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Finally, it would be interesting to know whether there are specific variables, other than year of publication, associated with reporting of competing interests—for example, the number of authors or the source of funding for each publication.²

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1 Hussain A, Smith R. Declaring financial competing interests. Survey of five general medical journals. *BMJ* 2001;323:263-4. (4 August.)
2 Papanikolaou GN, Baltogianni MS, Contopoulos-Ioannidis DG, Haidich AB, Giannakakis IA, Ioannidis JPA. Reporting of conflicts of interest in guidelines of preventive and therapeutic interventions. *BMC Med Res Methodol* 2001;1:3.

Breast feeding must consider HIV transmission in Latin America and the Caribbean

EDITOR—Betrán et al's paper confirms the importance of exclusive breast feeding in reducing infant morbidity and mortality in the Latin American and Caribbean region.¹ The authors did not, however, mention other cost effectiveness analyses of the promotion of breast feeding in Latin America that have been carried out.

In particular, through controlled designs Horton et al examined the effectiveness and cost of hospital based promotion of breast feeding in urban areas in three Latin American countries (Mexico, Honduras, and Brazil).² They concluded that investing in the promotion of exclusive breast feeding and of any breast feeding is highly cost effective and should be part of the basic public health and clinical services packages of countries in the region.

This work highlighted the relevance of breastfeeding peer counsellors, which was confirmed in a subsequent experimental study in Mexico City.³ There, a threefold to fivefold increase in exclusive breastfeeding rates at 3 months post partum was achieved through prenatal and postnatal home visits by trained peer counsellors.

The AIDS pandemic has major implications for the promotion of breast feeding as HIV can be transmitted to children through breast feeding. The seroprevalence of HIV among women of reproductive age is relatively low in Latin America compared with sub-Saharan Africa and Asia but is relatively high in several Caribbean countries and some high risk areas of Latin America. Efforts to promote breast feeding in the region need to take into account the local epidemiology of the AIDS pandemic and available educational and therapeutic strategies for reducing the risk of vertical transmission of HIV from infected mothers to their children.⁴

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1 Betrán AP, de Onís M, Lauer JA, Villar J. Ecological study of effect of breast feeding on infant mortality in Latin America. *BMJ* 2001;323:303-6. (11 August.)
2 Horton S, Sanghvi T, Phillips M, Fiedler J, Perez-Escamilla R, Lutter C, et al. Breastfeeding promotion and priority setting in health. *Health Policy Plan* 1996;11:156-68.
3 Morrow AL, Guerrero ML, Shults J, Calva JJ, Lutter C, Bravo J, et al. Efficacy of home-based peer counselling to promote exclusive breastfeeding: a randomised controlled trial. *Lancet* 1999;353:1226-31.
4 Perez-Escamilla R. Promoting breast-feeding in the era of AIDS. *Pan Am J Public Health* 2001;9:357-61.

Systematic reviews of evaluations of diagnostic and screening tests

Odds ratio is not independent of prevalence

EDITOR—Deeks, in the third of four articles on evaluations of diagnostic and screening tests, promoted the odds ratio as often being constant regardless of the diagnostic threshold.¹ We agree with Deeks's statement that the choice of threshold varies according to the prevalence of the disease. But the statement that the odds ratio is generally constant regardless of the diagnostic threshold can be misleading.

The value of an odds ratio, like that of other measures of test performance—for example, sensitivity, specificity, and likelihood ratios—depends on prevalence.² For example, a test with a diagnostic odds ratio of 10.00 is considered to be a very good test by current standards. It is easy to verify that this is generally true only in populations at high risk. A diagnostic odds ratio of 10.00 in a low risk population may represent a very weak association between the experimental test and the gold standard test. This is so because the observable range of values for an odds ratio increases as the prevalence of the disease decreases (moves away from 1/2).

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2 Kraemer HC. The robustness of common measures of 2 x 2 association to bias due to misclassifications. *American Statistician* 1985;39:286-90.

Two issues were simplified

EDITOR—We would like to draw attention to two points, which Deeks in his review article simplified.¹

Firstly, consider an example to illustrate the futility of what might be called the "reflex to fill the fourfold table" in research into diagnostic accuracy. Consider a study on an experimental test that claims to give clinicians more certainty in situations where they have only a few indications that disease may be present. But let us assume that the indications are not strong enough to justify the performance of truly invasive tests. Without the new experimental test these patients would be sent home. The value of the new test lies in its ability to identify those patients who have the disease and would

benefit from treatment. In this scenario, the analysis of only those patients who test positively on the experimental test (two cells filled of the fourfold table) suffices to learn about its usefulness.

Secondly, Deeks ends his explanation of the application of the likelihood ratio by saying that knowledge of other characteristics of a particular patient that either increase or decrease their prior probability of endometrial cancer can be incorporated into the calculation by adjusting the pretest probability accordingly. This, however, assumes constancy of likelihood ratios, which should not be assumed because it is usually incorrect. In practice, the knowledge of other patient characteristics will have an influence on the magnitude of the likelihood ratios of following tests. This is so because when a chain of diagnostic tests (history taking, physical exam, lab tests, or imaging) is performed on a patient, certain results from his or her clinical history make the likelihood to find certain lab results more (or less) likely. This in turn influences the chances of finding certain imaging results. In other words, the results of the component tests are not mutually independent. For example, on average, women with a positive test on ultrasound (thickened endometrium) are more likely to test positively on hysteroscopy, in which the endometrial thickness is also assessed, albeit in a different manner.

The theoretical solution to this problem is the calculation of likelihood ratios that are conditional on the results of the preceding tests in the diagnostic test chain. In practice, this is usually not feasible owing to lack of data, and most investigators use logistic regression models to account for all these dependencies. These models, however, yield diagnostic odds ratios, not likelihood ratios. It is partly this complexity that hampers the application of simple diagnostic accuracy studies to clinical practice. In figure 2 the numerators in the second column of the right hand panel represent the number of false positives, not the true negatives.

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Uptake of antenatal screening for HIV infection can be high outside London too

EDITOR—Cliffe et al point out that if the national target of an 80% reduction in vertical transmission of HIV is to be reached by December 2002 then rates of antenatal

diagnosis of HIV infection must improve outside London.¹

Results from an unlinked anonymous survey of salivary dried blood spots suggest that Brighton and Hove is a low prevalence area, with an estimated two women with HIV infection giving birth each year. Since the introduction of routine antenatal testing 98% of women have agreed to HIV testing, and in the past 14 months HIV infection has been diagnosed in three women. All have accepted recommended interventions to reduce vertical transmission. Several factors seem to be contributing to the sustained high uptake:

- Before antenatal testing began a coordinator (MO) was appointed who was responsible for the planning and delivery of training to community midwives
- Close links have been maintained with the midwives since this initial period, and the service has had ongoing monitoring and evaluation
- Specific training for new and returning midwives has been provided
- Training is focused on attitudes and skills, reflecting the plethora of research showing that the belief of the midwife in HIV testing is key in a pregnant woman's decision to have the test.

We have shown that the Department of Health's target of a 90% uptake of antenatal HIV testing² is achievable in low prevalence areas outside London. We hope that this example will inform practice in other areas, especially as—as Cliffe et al point out—over one quarter of pregnant women infected with HIV live outside London.

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- 1 Cliffe S, Tookay PA, Nicoll A. Antenatal detection of HIV: national surveillance and unlinked anonymous survey. *BMJ* 2001;323:376-7. (18 August.)
- 2 UK Health Departments. *Targets aimed at reducing the number of children born with HIV: report from an expert group*. London: Stationery Office, 1999.

Increasing email consultations may marginalise more people

EDITOR—The explanations offered by Mechanic on why doctors feel stressed are both plausible and likely.¹ As a general practitioner in the United Kingdom I am often at the receiving end of increased expectations of patients, as well as increasing guidance not only on how I should do more but also on how I should do it. I am thinking here, for example, of the guidelines from the National Institute for Clinical Excellence (NICE) and the national service frameworks.

I am, however, uncomfortable with Mechanic's proposed solution to the problem—namely, that doctors should spend more time consulting by email with their patients. In the United Kingdom internet access is related to socioeconomic class, with those living in a household headed by

someone in a routine or semiroutine occupation accessing the internet less often compared with those living in households headed by someone in a managerial or professional occupation (23-36% v 68-87% in a one month period).² Although computer ownership has increased in the United Kingdom from 18% in 1988 to 34% 1998-9, certain groups of the population are less likely to own computers. The most important of these are people aged 60 and over (4% ownership rate in 1998-9).³

Mechanic's proposed solution seems likely to marginalise old and poor people in favour of younger and socioeconomically advantaged people. It has long been recognised that those who need health care the most are least likely to receive it.⁴ By increasing the use of email consultations we may be at risk of using a cyber age solution that perpetuates an age old problem.

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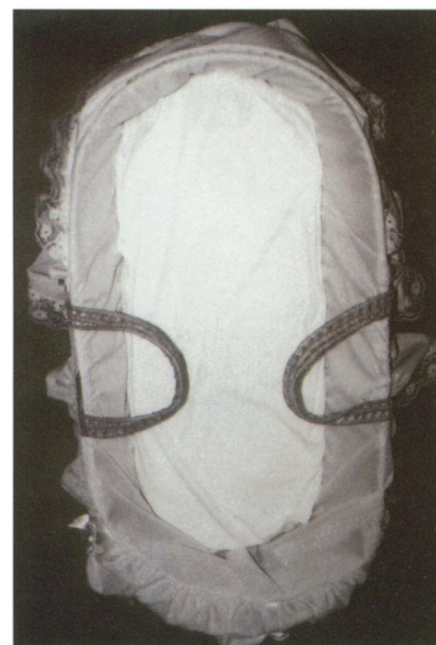
- 1 Mechanic D. How should hamsters run? Some observations about sufficient patient time in primary care. *BMJ* 2001;323:266-8. (4 August.)
- 2 Office for National Statistics. *Internet access*. London: ONS, April 2001. (www.statistics.gov.uk/statbase/publication.asp?su=11&B2A=Contents) (accessed 19 Aug 2001).
- 3 Office for National Statistics. *Households with selected consumer durables, 1972 to 1998-99: Social trends dataset general household survey*. (www.statistics.gov.uk/statbase/xsdataset.asp) (accessed 19 Aug 2001).
- 4 Hart JT. The inverse care law. *Lancet* 1971;i:405-12.

Moses baskets are a potential health hazard

EDITOR—Moses baskets are commonly used items in households around the country. Some are fitted with carrying handles. Within two months in 2000 we encountered three cases of babies falling out of such baskets after an unintentional slip of the handles; two of these cases resulted in skull fractures. A possible diagnosis of non-accidental injury was ruled out.

Close inspection of the Moses baskets showed that the handles did not seem long enough to meet in the middle (figure). This means that a tighter grip around the handles is needed, which increases the risk of an unintentional slip. The British Standards Institute has published guidelines on safety requirements on carrycots and stands but no specific standards on the length of handles have been defined.¹ As a result of our correspondence, the British Baby Products Association has promised to raise the matter with CEN, the European Committee for Standardisation, where BS EN 1466:1998 is currently under review.

A literature search using Medline and the library of the Child Accident Prevention Trust did not identify any previously published reports about incidents involving Moses baskets. Several manufacturers did not seem to be aware of the problem. Nevertheless, a computer search of the home accident surveillance system, which is part of the Department of Trade and Indus-



One of the Moses baskets involved in the three cases reported here, highlighting the distance between both handles when loosely put together in the middle

try, shows 24 reported cases in 10 years that were of a similar nature to ours. Taking into account that this database includes only reported cases and monitors only a fraction of the hospitals in the country, it is reasonable to assume that the real incidence of incidents involving Moses baskets may be much higher.

Most of the incidents involving a baby carrier will not result in any harm, especially as the babies concerned usually fall from a low height. Earlier this year a community based study showed an incidence of 22% of falls of all types in premobile infants, with serious injuries occurring in less than 1%.² By far the commonest site of injury seemed to be the head.

Our cases highlight the importance of raising awareness of parents, health professionals, and manufacturers of the potential health risks that Moses baskets can pose to babies.

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Competing interests: None declared.

- 1 British Standards Institute. *Child care articles. Carry cots and stands. Safety requirements and tests*. London: BSI, 1998. (BS EN 1466.)
- 2 Warrington SA, Wright CM, ALSPAC Study Team. Accidents and resulting injuries in premobile infants: data from the ALSPAC study. *Arch Dis Child* 2001;85:104-7.



Rapid responses

Correspondence submitted electronically is available on our website